

19713-345

1/28/2014

1/13



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Washington, D.C. 20460

OFFICE OF  
CHEMICAL SAFETY AND  
POLLUTION PREVENTION

January 28, 2014

Luz Chan  
Drexel Chemical Company  
P.O. Box 13327  
Memphis, TN 38113-0327

Subject: Notification per PR Notice 98-10  
Drexel De-Ester LV4 Herbicide  
EPA Reg. No. 19713-345  
Application Dated January 2, 2014

Dear Ms. Chan:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the subject product. The Registration Division (RD) has conducted a review of this request and finds that the action falls within the scope of PRN 98-10. The label submitted with the application has been date-stamped "Notification" and will be placed in our records.

If you have any questions, please contact Mindy Ondish at (703)605-0723 or at [ondish.mindy@epa.gov](mailto:ondish.mindy@epa.gov).

Sincerely,

*Mindy Ondish, for*

Kathryn V. Montague  
Product Manager 23  
Herbicide Branch  
Registration Division (7505P)

2/13

Please read instructions on reverse before completing

Form Approved, OM

2070-0060, Approval expires 2-28-95



United States  
Environmental Protection Agency  
Washington, DC 20460

Registration  
 Amendment  
 Other

OPP Identifier Number

Application for Pesticide - Section I

1. Company/Product Number 19713-345	2. EPA Product Manager Kathryn Montague	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) DREXEL DE-ESTER LV4	PM# 23/Herbicide Branch	
5. Name and Address of Applicant (Include ZIP Code) Drexel Chemical Company P.O. Box 13327 Memphis, TN 38113-0327 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____	<b>NOTIFICATION</b>  JAN 28 2014
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.	
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.	

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Submission of revised label per CDPDR's request. Details are in the cover letter accompanying this submission.

This notification is consistent with the provisions of PR Notice 98-10 and EPA Regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the Confidential Statement of Formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under Sections 12 and 14 of FIFRA.

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Metal Plastic Glass Paper Other (Specify) _____		
* Certification must be submitted		If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt	No. per container
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input type="checkbox"/>	
6. Manner in Which Label is Affixed to Product <input type="checkbox"/> Lithograph Paper glued <input type="checkbox"/> Stenciled			<input type="checkbox"/> Other _____		

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)					
Name Luz G Chan		Title Registration Manager		Telephone No. (Include Area Code) (901) 774-4370	
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.					6. Date Application Received  (Stamped)
2. Signature 		3. Title Registration Manager			
4. Typed Name Luz G Chan		5. Date January 2, 2014			



**Drexel Chemical Company**

January 2, 2014

Document Processing Desk (NOTIF)  
OPP(7504P), U.S. EPA  
Rm S-4900, One Potomac Yard  
2777 South Crystal Drive  
Arlington, VA 22202

**Re: Submission of Label with Changes per California Dept. of Pesticide Regulation (CDPR)  
DREXEL DE-ESTER LV4 (EPA Reg. No. 19713-345)**

Sir/Madam:

Herewith, please find:

1. Completed EPA Form 8570-1
2. Two copies of the label (345CSP-1213\*) with the following changes per CDPR's request:
  - On page 3, under the section 'Weeds Controlled', added the California use restriction for Broom snakeweed, Common mullein, Milkweed climbing, and Sheep sorrel. Also added an asterisk after Docks, Vervains and Wild onions. The alternative name, "Nutgrass", for Nutsedge was also added.
  - On page 5, under Conservation Reserve Program (CRP), the California use rate for annual broadleaf weeds was added.
  - Under Forestry Management on page 6, the subheading "Forest Site Preparation, Forest Roadsides.....and Reforestation Areas)" was added to match Drexel De-Ester LV6 (19713-655). Also, the California use rate for forest site preparation was added. Added as well the minimum use rate of "3 pints" for conifer release and dormant applications.
  - On page 7, the "4 lbs. a.e." typographical error under Grass Seed Crops was corrected to read "2 lbs. a.e."

The above changes are highlighted for easy reference.

If you have questions/clarification regarding this submission, I can be reached at (901) 774-4370 or e-mail [lchan@drexchem.com](mailto:lchan@drexchem.com).

Thank you.

Respectfully yours,  
DREXEL CHEMICAL COMPANY

Luz G Chan  
Registration Manager

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**GROUP 4 HERBICIDE**

**NOTIFICATION**

**JAN 28 2014**

**Drexel**

# De-Ester<sup>TM</sup> LV4

Herbicide

**ACTIVE INGREDIENT:**

Isooctyl ester of 2,4-Dichlorophenoxyacetic acid*	65.4%
<b>OTHER INGREDIENTS**:</b>	<b>34.6%</b>
<b>TOTAL:</b>	<b>100.0%</b>

\* Equivalent to 43.4% 2,4-D acid or 3.76 pounds per gallon. Isomer specific by AOAC Method.

\*\* Contains petroleum distillates.

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

See **FIRST AID** Below

EPA Reg. No. 19713-345

Net Content:

EPA Est. No. 19713-TN-8

2.5 Gals. (9.46 L)

### FIRST AID

**IF SWALLOWED:**

- Call a poison control center or doctor immediately for treatment advice.
- Do not give any liquid to the person.
- Do not induce vomiting unless told to do so by the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

**IF ON SKIN OR CLOTHING:**

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15 to 20 minutes.
- Call a poison control center or doctor for treatment advice.

**IF IN EYES:**

- Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

**IF INHALED:**

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
- Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

**Note to Physician:** Contains petroleum distillate. Vomiting may cause aspiration pneumonia. If swallowed, stomach contents should be evacuated quickly in a manner which avoids aspiration. Otherwise, treatment should be directed at the control of symptoms and clinical condition.

### PRECAUTIONARY STATEMENTS (Cont.)

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Some materials that are chemical-resistant to this product are Barrier laminate, Nitrile, or Viton. If you want more options, follow the instructions for category E on an EPA chemical resistance category selections chart.

**All mixers, loaders, applicators, flaggers and other handlers must wear:** Long-sleeved shirt and long pants, shoes and socks, chemical-resistant gloves and chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.

See Engineering Controls for additional requirements.

Follow manufacturer's instructions for cleaning, maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

**ENGINEERING CONTROLS**

Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for agricultural pesticides [40 CFR 170.240(d)(6)]. When handlers use enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### USER SAFETY RECOMMENDATIONS

**Users should:** 1) Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. 2) Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water. 3) Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

Use of this product in certain portions of California, Oregon and Washington is subject to the January 22, 2004 Order for injunctive relief in Washington Toxics Coalition, et. al. v. EPA, C01-0132C, (W.D. WA). For further information, please refer to EPA web site: <http://www.epa.gov/espp/litstatus/wtc/index.htm>.

### PRECAUTIONARY STATEMENTS

**Hazards to Humans and Domestic Animals**

**CAUTION:** Harmful if swallowed or if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in certain individuals. (Continued)

Manufactured By:

**Drexel Chemical Company**

P.O. BOX 13327, MEMPHIS, TN 38113-0327

**SINCE 1972**

345CSP-1213\*

DE-ESTER LV4 Page 1 of 10

### MIXING AND LOADING

Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Precautions should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

### USE INFORMATION

DE-ESTER LV4 herbicide is intended for the control of many Broadleaf weeds, Herbaceous perennials and Woody plants susceptible to 2,4-D in grass pastures, certain crops and non-crop areas.

Apply this product as water or spray oil during warm weather when weeds or brush are actively growing. Application under drought conditions often will give poor results. Use low spray pressure to minimize drift. On cropland and along roadsides, do not exceed 20 psi pressure. Apply enough spray volume to provide uniform coverage of weeds and brush, usually 5 to 20 gallons per acre by ground equipment and 3 to 5 gallons by aircraft. Higher gallonage may be used if desired to improve spray coverage. Generally, the lower dosage specified on this label will be satisfactory for young, succulent growth of sensitive weed species. For less sensitive species and under conditions where control is more difficult, the higher dosage will be needed.

Excessive amounts of this herbicide in the soil may temporarily inhibit seed germination or plant growth. Violent wind storms may move soil particles. If 2,4-D is on soil particles and they are blown onto the susceptible plants, visible symptoms may appear. Serious injury is unlikely. The hazard of movement of 2,4-D on dust is reduced if treated fields are irrigated or if rain occurs shortly after application.

At high temperatures, vapors from this product may injure susceptible plants growing nearby.

Deep-rooted Perennial weeds such as Canada thistle and Field bindweed and many Woody plants usually require repeated applications for maximum control. Do not apply this product where spray drift may contact nearby susceptible crops or other desirable plants or may contaminate water for irrigation or domestic use. Read and follow all use precautions given on this label.

**Note:** If there are uncertainties concerning special local use situations or specific crop variety tolerances to 2,4-D, consult your State Agricultural Experiment Station or Local Extension Service weed specialist for advice.

### WEED RESISTANCE MANAGEMENT

#### GROUP 4 HERBICIDE

This product is a Group 4 herbicide. Any weed population may contain or develop plants naturally resistant to this product and other Group 4 herbicides. Weed species with acquired resistance to Group 4 may eventually dominate the weed population if Group 4 herbicides are used repeatedly in the same field or in successive years as primary method of control for targeted species. This may result in partial or total loss of control of those species by this product or other Group 4 herbicides.

To delay herbicide resistance, consider:

- Avoiding the consecutive use of this product or other target site of action Group 4 herbicides that have a similar target site of action on the same weed species.
- Using tank-mixtures or premixes with herbicides from different target site of action Groups as long as the involved products are all registered for the same use, have different sites of action and are both effective at the tank-mix or prepack rate on the weed(s) of concern.
- Basing herbicide use on a comprehensive IPM program.
- Monitoring treated weed populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors and/or manufacturer for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product through any type of irrigation system. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exemptions pertaining to the statements on this label about Personal Protective equipment (PPE) and Restricted Entry Interval (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the REI of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: Coveralls, chemical-resistant gloves made of any waterproof material, and shoes plus socks.

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses. Do not allow people or pets to enter the treated area until sprays have dried.

### USE PRECAUTIONS

**Chemigation:** Do not apply this product through any type of irrigation system.

**Susceptible Crops and Other Desirable Broadleaf Plants:** Avoid contact of 2,4-D with susceptible and other desirable Broadleaf crops. Do not apply directly to or otherwise permit even minute amounts to contact Cotton, Grapes, Tobacco, Fruit trees, Vegetables, Flowers, Ornamentals or other desirable plants susceptible to 2,4-D.

Do not use in or near a greenhouse.

**DO NOT APPLY IN THE VICINITY OF COTTON, GRAPES, TOBACCO, TOMATOES OR OTHER DESIRABLE 2,4-D SUSCEPTIBLE CROPS OR PLANTS. DO NOT SPRAY WHEN WIND IS BLOWING TOWARDS SUSCEPTIBLE CROPS OR ORNAMENTAL PLANTS.**

**Application Equipment:** Do not apply with hollow cone-type insecticide or other nozzles that produce a fine-droplet spray.

To avoid injury to desirable plants, do not handle or apply other agricultural chemicals with the same equipment used for this product unless appropriately cleaned first. Local conditions may affect the use of herbicides. Consult your State Agricultural Experiment Station or Extension Service weed specialists for cleaning methods which are in compliance with local regulations and for advice in selecting treatments from this label to best fit local conditions. Be sure that use of this product conforms to all applicable regulations.

### SPRAY DRIFT MANAGEMENT

A variety of factors including weather conditions (e.g., wind direction, wind speed, temperature, relative humidity) and method of application (e.g., ground, aerial, airblast) can influence pesticide drift. The applicator must evaluate all factors and make appropriate adjustments when applying this product.

**Droplet Size:** When applying sprays that contain 2,4-D as the sole active ingredient, or when applying sprays that contain 2,4-D mixed with active ingredients that require a coarse or coarser spray, apply only as a coarse or coarser spray (ASAF standard 572) or a volume mean diameter of 385 microns or greater for spinning atomizer nozzles.

When applying sprays that contain 2,4-D mixed with other active ingredients that require a medium or more fine spray, apply only as a medium or coarser spray (ASAE standard 572) or a volume mean diameter of 300 microns or greater for spinning atomizer nozzles.

**Wind Speed:** Do not apply at wind speeds greater than 15 mph. Only apply this product if the wind direction favors on-target deposition and there are not sensitive areas (including, but not limited to, residential areas, bodies of water, known habitat for non-target species, non-target crops) within 250 feet downwind. If applying a medium spray, leave one swath unsprayed at the downwind edge of the treated field. **Temperature Inversions:** If applying at wind speeds less than 3 mph, the applicator must determine if: a) conditions of temperature inversion exist, or b) stable atmospheric conditions exist at or below nozzle height. Do not make applications into areas of temperature inversions or stable atmospheric conditions.

**Susceptible Plants:** Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use, or consumption. Susceptible crops include, but are not limited to, Beans, Cotton, Flowers, Grapes (in growing stage), Fruit trees (foliage), Okra, Ornamentals, Soybeans (vegetative state), Sunflowers, Tobacco, Tomatoes and other Vegetables. Small amounts of spray drift that might not be visible may injure susceptible Broadleaf plants.

**Other State and Local Requirements:** Applicators must follow all state and local pesticide drift requirements regarding application of 2,4-D herbicides. Where states have more stringent regulations, they must be observed.

**Equipment:** All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers or surrogates.

**Additional Requirements for Aerial Application:** The boom length must not exceed 75% of the wingspan or 90% of the rotor blade diameter.

Release spray at the lowest height consistent with efficacy and flight safety. Do not release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. This requirement does not apply to forestry or rights-of-way applications. When applications are made with a crosswind, the swath will be displaced downwind. The applicator must compensate for this by adjusting the path of the aircraft upwind.

**Additional Requirements for Ground Boom Application:** Do not apply with a nozzle height greater than 4 feet above the crop canopy. 2,4-D esters may volatilize during conditions of low humidity and high temperatures. Do not apply during conditions of low humidity and high temperatures.

**WEEDS CONTROLLED**

This product is used for control of numerous Broadleaf weeds and certain 2,4-D susceptible Woody plants without injury to most established grasses. Species controlled include the following, plus many others:

Alder	Coastal redstem sage	Henbit
Alfalfa*	Cockle	Hoary cress*
Artichoke (Jerusalem)*	Cocklebur	Honeysuckle
Aster (Many-flowered)*	Coffee bean	Horsetail
Austrian fieldcress	Coffeeweed	Horseweed (Marestail)
Beggarsticks	Common mullein <sup>1</sup>	Indiana mallow
Biden	Cornflower	Indigo
Bindweed (European, Field, Hedge)*	Coyotebrush	Ironweed
Bitterweed	Creeping Jenny	Klamathweed
Bitter wintercress	Croton	Knotweed*
Bitterwood	Curly indigo	Kochia*
Blackeyed Susan	Dandelion	Jewelweed
Blue lettuce*	Devil's claw	Jimsonweed
Blueweed (Texas)	Docks*	Ladysthumb
Boxelder	Dogbane*	Lambsquarter
Broom snakeweed* <sup>1</sup>	Dogfennel	Loco (Bigbend)
Broomweed	Elderberry	Locoweed
Buckbrush	Evening primrose (Common)	Lupines
Buckhorn	Fanweed	Mallow (Dwarf, Little, Venice)
Buckhorn plantain	Fleabane	Manzanita
Buckwheat (Wild)	(Daisy, Rough)	Marijuana
Bulrush (Tule)	Fiddleneck	Marshelder
Buttercup	Flixweed	Mexican weed
Burdock	Florida pusley	Milkvetch
Bur ragweed	Frenchweed	Milkweed (Climbing) <sup>1</sup>
Burhead	Galinsoga	Morningglory (Annual, Common, Ivy, Wooly)
Carpetweed	Goatsbeard	Musk thistle
Catnip	Goldenrod*	Mustard (Except blue)
Cherokee rose	Goosefoot	Nettles*
Chamise	Ground ivy*	Nutsedge
Chickweed	Gumweed	(Nutgrass)
Chicory	Halogeton	
Cinquefoil	Hawkweed (Orange)*	
	Healall	
	Hemp (Wild)	

(Continued)

(Cont.) Parsnip	Sheep sorrel <sup>1</sup>	Velvetleaf
Pennycress (Fanweed)	Shepherdspurse	Vervains*
Pennywort	Sicklepod	Vetch
Peppergrass	Smartweed (Annual)*	Virginia creeper
Pepperweed (Field)	Sneezeweed (Bitter)	Water plantain
Pigweed**	Southern wild rose	Water primrose
Plantains	Sowthistle (Annual, Common, Perennial, Spiny)	Water wild mustard
Poison hemlock	Spanishneedles	Wild carrot*
Poison ivy	St. Johnswort	Wild garlic*
Pokeweed	Starthistle	Wild lettuce
Poorjoe	Stinging nettle	Wild mustard
Povertyweed	Stinkweed	Wild onion*
Prickly lettuce*	Sumac	Wild parsnip
Primrose	Sunflower	Wild radish
Puncturevine	Sweet clover	Wild rape
Purslane	Tansymustard	Wild strawberry
Rabbitbrush	Tansy ragwort	Wild sweet potato
Radish (Wild)	Tanweed	Willow
Ragweed	Tarweed	Witchweed
Ragwort (Tansy)*	Thistle (Blessed, Bull)	Wormseed
Rape (Wild)	Thistle (Canada)*	Wormwood
Redstem	Thistle (Musk)	Yellow sweet clover (Annual)
Sagebrush (Big, Coastal, Sand)	Thistle (Russian)	Yellow rocket
Salsify	Toadflax	Yellow sandthistle plantain
Sand shinnery oak	Tumbleweed	Yellow starthistle

\* These species may require repeat treatments and/or specified higher rates.

\*\* The control of "hybrid" Pigweeds appears to be less satisfactory from 2,4-D products than formerly experienced on "non-hybrid" varieties. Since 2,4-D herbicides are not as effective on the "hybrid" Pigweed, it is necessary to apply higher rates of 2,4-D for control, especially later in the growing season. Higher rates injure some crops, so less than satisfactory Pigweed control may be experienced by the highest tolerated crop dosages.

<sup>1</sup> In California, do not use this product to control this weed.

**MIXING INSTRUCTIONS**

**Water Based Spray:** Fill the equipment half full of water, agitate while adding this product, then add the rest of water.

**Water and Soybean Oil or Petroleum Oil Based Spray:** First mix this product with the oil, then add to water. If vigorous agitation is possible, the oil can be added last. DO NOT ADD OIL FIRST.

**Soybean Oil or Petroleum Oil Based Spray:** Add this product to straight oil to form a solution. Do not allow water to get into this mixture, if it does an invert emulsion will form.

**Use with Liquid Nitrogen Fertilizer:** This product may be combined with liquid nitrogen fertilizer suitable for weed and feed applications for Corn, Grasses Grown for Seed, Pastures or Small grains. Use this product in accordance with directions for these crops provided in this label. Use liquid fertilizer at rates recommended by the supplier or Extension Service Specialist. Test for mixing compatibility by mixing spray ingredients in correct proportions in a clear glass jar before mixing in spray tank. A compatibility aid such as MIX™, Unite or Compex may be needed in some situations. Compatibility is best with liquid fertilizer solutions containing only nitrogen. Mixing with N-P-K solutions may not be satisfactory, even with the addition of a compatibility aid.

Premixing this product with 1 to 4 parts water may help in situations when mixing difficulty occurs. Fill the tank about half full with the liquid fertilizer, then add the required amount of this product with agitation. Maintain agitation and complete filling the tank with liquid fertilizer. Apply immediately and continue agitation in spray tank during application. Do not store the spray mixture overnight. Application during very cold weather (near freezing) is not advisable.

**TANK-MIXTURES**

This product may be used in combination with other herbicides registered for the same uses on this label. Refer to the label of the tank-mixture partner(s) for any additional use instructions or restrictions. Always follow the most restrictive label.

**USE INSTRUCTIONS**

Unless otherwise directed, apply the specified rate in minimum 1 gallon of total spray per acre by air and in minimum 3 gallons of total

spray per acre by ground. If band treatment is used, base the dosage rate on the actual area to be sprayed. Use more water for both methods when adverse growing conditions are present. DO NOT apply with high spray pressures hollow cone or other nozzle types that produce small spray droplets which may drift. The use of a suitable drift control agent at the proper rate will aid in the reduction of spray drift.

When product is used for weed control in crops, the growth stage of the crop must be considered. For crop uses, do not mix with oil or other adjuvants unless specifically directed on label. To do so may reduce herbicide's selectivity and could result in crop damage. If you are not prepared to accept some degree of crop injury, do not use this product. Crop varieties vary in response to 2,4-D and some are easily injured. Apply this product to varieties known to be tolerant to 2,4-D. If you are uncertain concerning tolerant varieties or local use situations that may affect crop tolerance to 2,4-D, consult your seed company, State Agricultural Extension Service or qualified crop consultant for advice. Use aerial applications only when there is no danger of drift to susceptible crops. Many states have regulations concerning aerial application of 2,4-D formulations. Consult local regulatory authorities before making applications. Although this product is a low volatile formulation, at temperatures above 90°F vapors may damage susceptible crops growing nearby.

**CORN (All Corn including Field, Pop, Sweet)**

Time of Application	Rate per Acre	Use Instructions
Pre-plant (Annual and Biennial broadleaf seedlings; Perennial weed seedlings; Existing cover crops)	1 to 2.1 pints	Planting of Corn must be delayed a minimum of 7 days after application at rates up to 1 pint per acre and a minimum of 14 days at rates from 1 to 2 pints per acre. Planting sooner after application than specified may result in unacceptable crop injury.
Do not perform tillage for at least 7 days after application. Do not use on sandy soils or unacceptable crop injury may result.		
Pre-emergence and Reduced Tillage (Broadleaf weeds and Annual grasses)	2.1 pints*	Apply after Corn is planted but before emergence for control of emerged Broadleaf weeds. The seed furrow must be completely closed at application or severe crop injury may result.
* Do not use on sandy soils or unacceptable crop injury may result.		
Emergence	1 pint	Apply in 5 to 30 gallons of water per acre by ground application or in 1 to 5 gallons of water by air just as Corn plants are breaking ground.
Post-emergence (Annual broadleaf weeds)	0.5 pint	Apply when Corn is less than 8 inches tall but to avoid crop injury, do not apply just after leaves have unfolded. If Corn is over 8 inches tall, use drop nozzles to keep spray off of Corn foliage as much as possible.
Post-emergence (Perennial broadleaf weeds)	0.75 to 1 pint*	Apply when weeds are in bud to bloom stage. If Corn is over 8 inches tall, use drop nozzles to keep spray off Corn foliage as much as possible. On Sweet Corn, use the lowest rate only to minimize potential for crop injury.
* Do not apply 2 weeks before tasseling to dough stage. Do not apply to open whorls. To avoid injury, do not use with atrazine, oil or other adjuvants. Application during high moisture and temperature conditions may cause injury or brittleness. Do not cultivate for 7 to 10 days after treatment or stalk breakage may occur.		

(Continued)

(Cont.)

Time of Application	Rate per Acre	Use Instructions
Pre-harvest (Field Corn and Popcorn Only)	1 to 2 pints	Use lower rate for small Annual and Biennial weeds and the higher rate for Perennial and larger hard to kill Annual and Biennial weeds. Apply after silks are completely brown (denting stage) to reduce weeds that interfere with harvest and to decrease weed seed production. Not allowed for use on Sweet corn.

**USE RESTRICTIONS FOR FIELD CORN AND POPCORN:**

- Do not use treated crop as fodder for 7 days following application.
- Pre-harvest Interval (PHI) is 7 days.
- Maximum of 5.2 pints (2.42 lbs. a.e.) per acre per crop cycle.
- Pre-plant or Pre-emergence: Limited to one pre-plant or pre-emergence application per crop cycle. Maximum of 2.1 pints (1 lb. a.e.) per acre per application
- Post-emergence: Limited to one post-emergence application per crop cycle. Maximum of 1 pint (0.5 lb. a.e.) per acre per application.
- Pre-harvest: Limited to one pre-harvest application per crop cycle. Do not exceed 2 pints per acre per application.

**USE RESTRICTIONS FOR SWEET CORN:**

- Do not use treated crop as fodder for 7 days following application.
- Pre-harvest Interval (PHI) is 45 days.
- Minimum of 21 days between applications.
- Maximum of 3.1 pints (1.5 lbs. a.e.) per acre per crop cycle.
- Pre-plant or Pre-emergence: Limited to one pre-plant or pre-emergence application per crop cycle. Maximum of 2.1 pints (1 lb. a.e.) per acre per application.
- Post-emergence: Limited to one post-emergence application per crop cycle. Maximum of 1 pint (0.5 lb. a.e.) per acre per application.

**CEREAL GRAINS (Barley, Oats, Rye, Wheat) NOT UNDERSEEDED WITH LEGUME**

Use the lower rate for small Annual and Biennial weeds. Use the higher rate for perennial weeds or hard to kill Annual or Biennial weeds. Only use the higher rate where heavy weed infestation is a problem and increased risk of crop damage is acceptable.

Crop/Time of Application/Weeds	Rate per Acre	Use Instructions
<b>Barley, Rye, Wheat:</b> Spring Annual and Biennial weeds	0.5 to 2 pints	Apply when grain is in full tiller stage (4 to 8 inches high) but before boot stage when weeds are small and actively growing. Up to 2 pints per acre may be used to control difficult weeds but do not use unless some crop damage is acceptable.
<b>Barley, Rye, Wheat:</b> Spring Perennial broadleaf weeds	1 to 2 pints	
<b>Rye, Wheat:</b> Winter Annual weeds	0.5 to 2 pints	Apply only in the Spring when crop is fully tillered but before grain is in boot stage. For improved control of difficult weeds, apply up to 2 pints per acre. Do not use the higher rate unless some crop damage is acceptable.
<b>Oats:</b> Spring-seeded	0.5 to 0.75 pint	Apply at full tiller but before early boot stage. Difficult to control weeds may require the higher rate but some injury may occur since Oats are less tolerant to 2,4-D than Barley or Wheat. Do not spray during or just after cold weather.
<b>Oats:</b> Fall-seeded (Southern)	0.75 to 1.5 pints	

(Continued)

<i>(Cont.)</i>		
Crop/Time of Application/Weeds	Rate per Acre	Use Instructions
Barley, Oats, Rye, Wheat: Pre-harvest	1 pint	Apply when grain is in hard dough stage to control weeds that will interfere with harvest. Apply when soil moisture is adequate for weed growth for best results.
Wheat: Perennial weeds (Emergency weed control)	2.5 pints*	Apply when weeds are approaching bud stage. Do not spray grain in the boot to dough stage. The 2.5 pints per acre application can produce injury to Wheat. Balance the severity of your weed problem against the possibility of crop damage. Where Perennial weeds are scattered, spot treatment is suggested to minimize the extent of crop injury. Do not apply this product to grain in the seedling stage. For aerial application on grain, apply this product in 1 to 5 gallons of water per acre. For ground application, use a minimum of 5 gallons of water per acre. *If intended for pre-harvest application, DO NOT exceed the allowable 1 pint (0.5 lb. a.e.) per acre per application.
Wild garlic, Wild onions	0.5 to 2 pints	Apply 1.5 pints when grain is at full tiller and when weeds are small. Apply 2 pints after harvest to the crop stubble. For control of new Fall growth of these plants refer to the "FALLOW LAND" use directions.
<b>USE RESTRICTIONS FOR CEREAL GRAINS:</b> <ul style="list-style-type: none"> <li>• Pre-harvest Interval (PHI) is 14 days.</li> <li>• Post-emergence: Limited to one post-emergence application per crop cycle. Maximum of 2 pints (1 lb. a.e.) per acre per application.</li> <li>• Pre-harvest: Limited to one pre-harvest application per crop cycle. Maximum of 1 pint (0.5 lb. a.e.) per acre per application.</li> <li>• Limited to 3 pints (1.425 lbs. a.e.) per acre per crop cycle.</li> </ul>		

**TANK-MIXTURES**

This product may be used in combination with metsulfuron-methyl such as Ally™; bromoxynil such as Buctril®; Dicamba, thifensulfuron-methyl plus tribenuron-methyl such as Harmony Extra™; Express™; chlorsulfuron plus flucarbazone-sodium such as Finesse™ at their earlier application intervals to control resistant weeds such as Kochia and Russian thistle. Refer to the tank-mix label for cautionary statements and specific restrictions. Follow the most restrictive label.

**CONSERVATION RESERVE PROGRAM (CRP) AREA PASTURES AND RANGELAND (Not in Agricultural Production)**

Weeds	Rate per Acre	Use Instructions
Annual broadleaf weeds	0.5 to 3 pints (California: 2 to 3 pints)	Do not apply after heads form or when grass is in boot to milk stage when seed crop is desired. DO NOT use on Alfalfa, Clover, other legumes or newly seeded Pastures. For aerial and ground applications, apply in minimum 2 gallons and minimum of 10 gallons of water per acre, respectively. To control Biennial and Perennial broadleaf weeds in established grasses, apply at a rate of 2 to 4 pints per acre. Apply to actively growing weeds. Treat when Biennial weeds are in the seedling to rosette stage and before flower stalks become apparent. Treat Perennial weeds in the bud to bloom stage. Deep rooted Perennial weeds may require the higher rate or repeated treatments Woody plants and any regrowth may require repeat treatments.
Biennial and Perennial weeds	2 to 4.2 pints	
Buckbrush, Coyotebrush, Rabbitbrush, Sagebrush, Other Chaparral species	4.2 pints	Apply in 5 to 10 gallons of water plus 1 gallon of oil or 1 to 2 quarts of a crop oil concentrate with at least 17% emulsifiers per acre or a non-ionic surfactant at 25% v/v surfactant to water (1 quart per 100 gallons of water) per acre.
Sand shinnery oak	4.2 pints	Apply in 5 gallons of oil or 4 gallons of water plus 1 gallon of oil or 1 to 2 quarts of a crop oil concentrate with at least 17% emulsifiers per acre or a non-ionic surfactant at 25% v/v surfactant to water (1 quart per 100 gallons of water) per acre.
<b>USE RESTRICTIONS:</b> <ul style="list-style-type: none"> <li>• Pre-harvest Interval (PHI) is 7 days for cut forage or hay.</li> <li>• Post-emergence: Limited to 2 applications per year. Maximum of 4.2 pints (2 lbs. a.e.) per acre per application.</li> <li>• Minimum of 30 days between applications.</li> <li>• If grass is to be cut for hay, the Agricultural Use Requirements for the Worker Protection Standard are applicable. For program lands such as Conservation Reserve Program, consult program rules to determine whether grass or hay may be used. The more restrictive requirements of the program rules or this label must be followed.</li> </ul>		

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**FALLOW LAND (Crop Stubble on Idle Land, Post-Harvest to Crops, or between Crops)**

Weeds	Rate per Acre	Use Instructions
Annual broadleaf weeds	1 to 2 pints	Use the lower rate for small actively growing weeds and the higher rate on larger or weather stressed weeds.
Biennial weeds	2 to 4.2 pints	Use the lower rate in the Spring on Biennial weeds such as the Musk thistle during the rosette stage before stalks have formed. Use the higher rate after stalk formation or in the Fall.
Perennial weeds	2 to 4.2 pints	Apply during the bud to bloom stage while weeds are actively growing. Do not till for 2 weeks after treatment or until the weeds start to die.
Wild garlic, Wild onions	4.2 pints	Apply to regrowth in Fall after harvest.
<b>USE RESTRICTIONS:</b>		
<ul style="list-style-type: none"> <li>Plant only labeled crops within 29 days following application. (See "PLANTING IN TREATED AREAS" below for additional information.)</li> <li>Limited to 2 applications per year.</li> <li>Maximum of 4.2 pints (2 lbs. a.e.) per acre per application.</li> <li>Minimum of 30 days between applications.</li> </ul>		
<b>PLANTING IN TREATED AREAS</b>		
<p><b>Labeled Crops:</b> Within 29 days after an application of this product, plant only those crops listed on this label or other registered 2,4-D labels. Follow more specific limitations if any provided in directions for specific crops. Labeled crops may be at risk of crop injury or loss if planted soon after application especially during the first 14 days. Consider the degradation factors stated below in weighing this risk.</p> <p><b>Other Crops:</b> All other crops may be planted 30 or more days after application without concern for illegal residues in the planted crop. However, under certain conditions there may be a risk of injury to susceptible crops. Degradation factors described below should be considered in weighing this risk. Under normal conditions, any crop may be planted without risk of injury if at least 90 days of soil temperatures above freezing have elapsed since application.</p> <p><b>Degradation Factors:</b> When planting into treated areas the risk of crop injury is less if lower rates of the product were applied and conditions following application have included warm moist soil conditions that favor rapid breakdown of 2,4-D. Risk is greater if higher rates of the product were applied and soil temperatures have been cold and/or soils have been excessively wet or dry in the days following application. Consult your local agricultural extension service or information about susceptible crops and typical conditions in your area.</p> <p><b>Precautions for Planting Cotton:</b> Following application of this product and following a minimum of rainfall or irrigation in a 24-hour period, wait an interval of 30 days prior to planting Cotton. Failure to observe these precautions may result in crop injury.</p>		

**FORESTRY MANAGEMENT  
Forest Site Preparation, Forest Roadsides, Brush Control, Established Conifer Release (Including Trees and Reforestation Areas)**

Use	Rate per Acre	Use Instructions
Forest Site Preparation	3 to 8.5 pints (California: 4 to 8.5 pints)	For control of susceptible Broadleaf weeds and brush on sites to be planted in forests, apply this product in sufficient spray volume for good plant coverage usually 6 to 25 gallons. Application can be made by air or ground (hand gun, boom or powered knapsack sprayer). Two to 8 quarts of diesel oil per acre or a suitable surfactant or penetrant may be added to improved brush control. For control of Alder prior to planting seedlings, apply this product in 8 to 25 gallons of water after Alder budbreak but before foliage is one-fourth full size. Application may be made by air or ground. If desired, diesel, fuel oil or kerosene may be substituted for water as diluent. As foliar spray for control of Alder prior to planting seedlings, apply 4 pints of this product per acre in 8 to 25 gallons of water, after most Alder leaves are full size. To increase penetration, 4 to 8.5 pints per acre of diesel, fuel oil, kerosene, or a suitable approved agricultural surfactant at specified label rates may be added to the spray mixture.
Conifer Release	3 to 6 pints	For applications in late Winter or Spring to control susceptible deciduous brush species such as Alder, Cascara, Cherry, Poplars, Willow, Service cherry and Vine maple during early growth and before Conifer budbreak, apply this product in diesel or stove oil by air or ground in sufficient spray volume for good plant coverage, usually 6 to 25 gallons. Do not use in plantations where Pine or Larch are among the desired species. For treatment before Conifer budbreak to control susceptible evergreen brush species, such as <i>Ceanothus</i> spp., Chinquapin, Mandrone, Manzanita and Tanoak, or deciduous brush after leaf-out, or Broadleaf weeds, use this product alone or with 0.5 to 2 gallons per acre of diesel oil or similar oil or suggested rates of suitable surfactants or penetrants. After Conifer budbreak, this product without oil, surfactant or penetrant can be used at a rate of up to 4 pints per acre, but may cause injury or suppression of Conifer growth. Use sufficient volume of spray for good coverage of brush, usually 6 to 25 gallons. Some species of Pine may be seriously injured by treatment at these growth stages. After Conifer species such as Jack pine, Ponderosa pine, Red pine, White pine, Black spruce, Red spruce, White spruce and Balsam fir cease growth and harden off and brush is still actively growing in late Summer, apply 3 to 6 pints of this
<i>(Continued)</i>		

<b>(Cont.)</b>		
<b>Use</b>	<b>Rate per Acre</b>	<b>Use Instructions</b>
Conifer Release (Cont.)	3 to 6 pints	product per acre by air or ground in enough water to obtain good plant coverage to control certain competing hardwood species such as Alder, Aspen, Birch, Hazel and Willow. Since this treatment may cause occasional Conifer injury, do not use if such injury cannot be tolerated. Refer to the "FOREST SITE PREPARATION" section of this label for use restrictions and precautions.
Tree Injections (Pine Release)	See "Use Instructions"	To control hardwoods, such as Elm, Hawthorn, Hickory, Maple, Oaks, Pecan, Sumac and Sweetgum, apply this product undiluted in a concentrate tree injector calibrated to apply 1 mL per injection. Space injections 2 inches apart, edge to edge, completely around the tree and close to the base. The injector bit must penetrate the inner bark. On hard-to-kill species such as Ash, Blue beech, Dogwood, Hickory and Red maple, make injections 1 to 1.5 inches apart, edge to edge. Treatment may be made at any time of the year. For best results, make injections during the growing season, May 15 to October 15. For dilute injections, mix 1 gallon of this product in 19 gallons of water. No Worker Protection Standard worker entry restrictions or worker notification requirements apply when this product is directly injected into agricultural plants.
Dormant Application (Other than Pine)	3 to 6 pints	For the control of susceptible deciduous brush species such as Alder, Cascara, Cherry, Poplar and Serviceberry, apply this product in sufficient diesel, fuel oil or kerosene for good coverage.
Pine Only	4 pints	Make application while Pine buds are still dormant. Apply this product in sufficient water for good coverage by air or ground equipment. Do not use this application unless some Pine injury is acceptable. Use of diesel, kerosene, or other oil, or addition of surfactants to spray mix may cause unacceptable Pine injury.
Christmas Tree Plantations	1 to 2 pints	For control of labeled Broadleaf weeds in Douglas fir Christmas trees, apply over the top of Douglas fir by ground or aerial application equipment only when the trees are dormant, prior to bud break. Do not spray over the top of Pine or true Firs ( <i>Abies</i> spp.). Directed sprays may be made to weeds in Christmas tree plantations of all Conifer species but the spray must not contact tree foliage as injury may occur. Do not apply to weakened, diseased, or stressed seedlings since unacceptable injury can occur. This product may be tank-mixed with atrazine for Christmas tree application. (See "TANK-MIXTURE" section below.)

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<b>(Cont.)</b>		
<b>Use</b>	<b>Rate per Acre</b>	<b>Use Instructions</b>
Herbaceous Weed Control	2 to 6 pints	To control over-wintering susceptible weeds such as False dandelion, Klamath weed, Plantain, Tansy ragwort, apply this product in sufficient water for good coverage. Make application at rates and timing indicated above if Pines are present. For control of Hazel brush and similar species in the Lake States area, apply 4 pints of product per acre in 8 to 25 gallons of water when new shoot growth of Hazel is complete, usually in mid-July.
<b>USE RESTRICTIONS:</b>		
<ul style="list-style-type: none"> <li>• Broadcast application: Do not apply more than 8.5 pints (4 lbs. a.e.) per acre per broadcast application. Limited to 1 broadcast application per year.</li> <li>• Basal spray, Cut surface (Frill and Stumps): Do not apply more than 17 pints (8 lbs. a.e.) per 100 gallons of spray solution. Limited to 1 basal spray or cut surface application per year.</li> <li>• Injection: Do not apply more than 2 mL of 4 pounds a.e. formulation per injection site. Limited to 1 injection application per year.</li> </ul>		

**TANK-MIXTURES**

This product can be tank-mixed with atrazine to control weeds in Christmas trees and forest plantings to aid in the establishment of young transplants of Austrian pine, Bishop pine, Blue spruce, Douglas fir, Grand fir, Jeffrey pine, Knobcone pine, Loblolly pine, Lodgepole pine, Monterey pine, Nobel fir, Ponderosa pine, Scotch pine, Sitka spruce, Slash pine and White fir.

Apply the labeled rates of Atrazine 4L, Atrazine 5F, or Atrazine 90 DF with 1 to 3 quarts of this product by ground or air when weeds are no more than 1.5 inches tall between Fall and early Spring (preferably in February or March) while trees are still dormant, or soon after transplanting. Uniform application is the key to good weed control. Use 20 to 40 gallons of water per acre for ground applications and a minimum of 5 gallons of water by air. Be sure equipment is properly calibrated. All screens in the spray system — nozzles, in-line and suction strainers — should be 15 mesh or coarser. Use a pump with capacity to maintain a nozzle pressure of 35 to 40 psi and sufficient agitation to keep the mixture in suspension in the spray tank. If a nurse tank is used, keep the mixture agitated while awaiting transfer to the spray tank.

**GRASS SEED CROPS**

<b>Weeds</b>	<b>Rate per Acre</b>	<b>Use Instructions</b>
Broadleaf weeds and Seedling weeds	1 to 4.2 pints	Apply in up to 30 gallons of water per acre by air or ground equipment in the Spring or Fall. Do not apply from early boot to milk stage. Spray seedling grass only after the five leaf stage, using 0.75 to 1 pint per acre to control small seedling weeds. After the grass is well established, higher rates of up to 4 pints per acre can be used to control hard-to-control Annual or Perennial weeds. For best results, apply when soil moisture is adequate for good growth. Do not use on Bent unless injury can be tolerated.
<b>USE RESTRICTIONS:</b>		
<ul style="list-style-type: none"> <li>• Do not apply more than 4.2 pints (2 lbs. a.e.) per acre per application.</li> <li>• Do not apply more than 2 applications per year.</li> <li>• Minimum retreatment interval of 21 days.</li> </ul>		

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**NON-CROP AREAS (Airfield, Ditches, Fencerows, Hedgerows, Highway and Utility Rights-of-Way, Industrial Sites, Railroads, Roadsides, Utility Power Lines)**

Weeds	Rate per Acre	Use Instructions
Annual broadleaf weeds	2 to 4.2 pints	Apply when weeds are young and growing vigorously.
Biennial and Perennial broadleaf weeds	2 to 3 pints	Spray perennial weeds when near the bud stage but not at flowering. Do not use on St. Augustine grass. Bentgrass, Clover legumes and Dichondra may be injured. Do not apply to newly seeded areas until grass is well established. Deep rooted perennials may require repeated treatments.
Tansy ragwort, Musk thistle	2 to 3 pints	Apply in rosette stage before bolting.
Wild garlic, Wild onion	2 to 4 pints	Apply in the early Spring and Fall when young and actively growing.
Woody plants	4 to 8.5 pints	By ground, apply up to 8.5 pints in 20 to 100 gallons of water. For increased effectiveness, add a crop oil concentrate with at least 17 % emulsifiers at 1 to 2 quarts per acre or a non-ionic surfactant at 25% v/v surfactant to water—1 quart per 100 gallons of water. Spray volumes of up to 500 gallons per acre may be needed for control if brush is dense. By air, apply 4 to 6 pints in 3 to 12 gallons volume per acre. For solid stands of susceptible brush, 2 to 4 quarts of fuel oil may be added.
Spot treatment	0.25 pint (4 fl. oz.)	Apply in 3 gallons of water mixing thoroughly and spray to the point of run-off. This dosage rate may only be used where injury may be tolerated.

**USE RESTRICTIONS:**

- Post-emergence (Annual and Perennial weeds): Limited to 2 applications per year. Maximum of 4.2 pints (2 lbs. a.e.) per acre per application. Minimum of 30 days between applications.
- Post-emergence (Woody plants): Limited to 1 application per year. Maximum of 8.5 pints (4 lbs. a.e.) per acre per year.
- Application to non-cropland areas are not applicable to treatment of commercial timber or other plants being grown for sale or other commercial use or for commercial seed production or for research purposes.

**TANK-MIXTURES**

**This Product Plus Dicamba or Triclopyr to Control Broadleaf Weeds and Woody Plants**

This product at the above rates can be tank-mixed with Diablo® Herbicide or other dicamba products, or with Garlon®, Tahoe® 4E, Tahoe 3A or other triclopyr products to control Broadleaf weeds and woody plants. Apply by ground or by air. Refer to the label of the tank-mixture partner(s) for use rates and any additional use instructions or restrictions. Always follow the most restrictive label.

**This Product Plus Chlorsulfuron, Metsulfuron-methyl or Sulfometuron for Improved Control of Resistant Biotypes Weeds**

This product at the above rates can be tank-mixed with Corsair®, Glean® herbicide or other chlorsulfuron products, or with Escort®, Patriot® or other metsulfuron-methyl products, or with Oust®, Spyder® other sulfometuron products for improved post-emergent weed control of resistant biotype weeds. Refer to the label of the tank-mixture partner(s) for use rates and any additional use instructions or restrictions. Always follow the most restrictive label.

**NO-TILL APPLICATION**

Rate per Acre	Use Instructions
13.5 fluid ounces	Use this product in the broadcast method with a normal boom or with direct pipes set 12 inches apart in 36 inch rows. Apply in 10 gallons of water per acre. Maintain uniform pressure and speed when applying.

**ORNAMENTAL TURF (Such as Golf courses, Parks, Cemeteries, Sports fields, Turfgrass and other Lawn and Grass Areas)**

Weeds	Rate per Acre	Use Instructions
Annual broadleaf weeds	2 pints	Do not apply to newly seeded areas until grass is well established. Where Bentgrass predominates, make 2 applications of 1 pint per acre at 3 week intervals. Do not use on susceptible Southern grasses such as St. Augustine, Bentgrass and Dichondra.
Biennial and Perennial broadleaf weeds	2 to 3.1 pints	Deep rooted perennials may require repeat applications. Clovers and legumes may be injured by this treatment.

**USE RESTRICTIONS:**

- Post-emergence: Limited to 2 applications per year. Maximum of 3.1 pints (1.5 lbs. a.e.) per acre per application.
- The maximum seasonal rate is 6.3 pints (3 lbs. a.e.) per acre excluding spot treatments.

**Control of Weeds in Newly Sprigged Coastal Bermudagrass**

Apply this product at 2 to 4 pints per acre pre-emergence and/or post-emergence. If applied post-emergence, do not exceed 3.1 pints per acre per application.

**PASTURE AND RANGELAND (Established Grass Pastures, Rangeland and Perennial Grasslands Not in Agricultural Production)**

Weeds	Rate per Acre	Use Instructions
Susceptible Annual and Biennial broadleaf weeds	2.1 pints (max.)	Do not apply more than 2.1 pints (1 lb. a.e.) per acre per application.
Moderately susceptible Biennial and Perennial broadleaf weeds; Difficult to control weeds; Woody plants	4.2 pints (max.)	Do not apply more than 4.2 pints (2 lbs. a.e.) per acre per application.
Spot treatments	4.2 pints (max.)	Do not apply more than 4.2 pints (2 lbs. a.e.) per acre per application.

**USE RESTRICTIONS:**

- Do not cut forage for hay within 7 days of application.
- Maximum of two applications per year.
- Do not apply more than 8.5 pints (4 lbs. a.e.) per acre per year.
- The minimum retreatment interval is 30 days.
- If grass is to be cut for hay, the Agricultural Use Requirements for the Worker Protection Standard are applicable.

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**POTATOES (RED) (Grown for Fresh Market)**

Properly timed applications of this product generally enhance red color, aid in storage retention of red color, improve skin appearance, increase tuber set and improve tuber size uniformity (fewer jumbos). Crop response may vary depending on variety, stress factors and local conditions. Consult with Agricultural Extension Service and other qualified crop advisors for local recommendations. Varieties with naturally dark red color generally benefit less from treatment.

Rate per Acre	Use Instructions
2.3 fluid ounces	Make first application when Potatoes are in the pre-bud stage (about 7 to 10 inches high) and a second application about 10 to 14 days later. Do not exceed two applications per crop. Do not harvest within 45 days of application. Uneven application, or mixture with other pesticides and additives, may increase the risk of crop injury.

**SORGHUM (MILO)**

Weeds	Rate per Acre	Use Instructions
Annual broadleaf weeds	0.5 pint	Apply to plants that are 5 to 15 inches tall. Do not treat plants less than 5 inches tall or from boot to early dough stage. Use drop nozzles when crop is 8 inches or taller. The higher rate may be needed for some weeds but chances of crop injury may increase. Do not use oil. Some varieties and hybrids are 2,4-D sensitive. Crop injury may also be increased by high moisture and temperature conditions. Check with your seed company and Extension Service for advice.
Perennial broadleaf weeds	0.75 to 1 pint	

**USE RESTRICTIONS:**

- The Pre-harvest Interval (PHI) is 30 days.
- Do not permit meat or dairy animals to consume treated crop as fodder or forage for 30 days following application.
- Post-emergence: Limited to 1 application per crop cycle. Maximum of 1 pint (0.5 lb. a.e.) per acre per application.

**SOYBEANS**

Time of Application	Rate per Acre	Use Instructions
Pre-plant	1 to 2.1 pints	Plant Soybean seeds as deep as practical or at least 1.5 to 2 inches deep after application. Seed furrow must be completely closed or severe crop injury will result. Do not perform tillage for at least 7 days after application. Do not use on Sandy soils or unacceptable crop injury may result. Do not replant treated field in the same growing season with crops that are not labeled for 2,4-D pre-plant use.

**USE RESTRICTIONS:**

- The maximum rate per crop cycle is 2.1 pints (1 lb. a.e.) per acre.
- Pre-plant: Limited to 2 pre-plant applications per crop cycle. Maximum of 1 pint (0.5 lb. a.e.) per acre per pre-plant application. Apply not less than 7 days prior to planting Soybeans.  
OR
- Pre-plant: Limited to 1 application per crop cycle. Maximum of 2.1 pints (1 lb. a.e.) per pre-plant application. Apply not less than 15 days prior to planting Soybeans.

**TANK-MIXTURES**

**This Product Plus Sencor® or other Metribuzin Products as Knockdown Herbicide for No-Till**

This product with Sencor DF or other metribuzin products alone or in combination with Dual®, Lasso®, Metolachlor, Surflan® or Prowl® may be applied as an early pre-plant surface application for the control of certain Broadleaf weeds and grasses in Soybeans in minimum or no-

till products. Apply 30 days prior to planting at 2 pints of this product (1 lb. a.e.) per acre with labeled rates of Sencor. Where grass herbicide is used in tank-mix, apply at the rates specified on that product's label.

**This Product Plus Turbo® 8EC in Reduced Tillage or No-Till Systems**

This product may be applied in combination with Turbo 8EC to control Annual grasses and Broadleaf weeds and the suppression of emerged Perennial weeds when Soybeans are directly seeded into a stale seedbed, cover crop or in previous crop residues.

Poor weed control and/or crop injury may result if directions are not followed. Do not use a rib-type press wheel on your no-till planter or crop injury may result. Apply 30 days prior to planting at 2 pints of this product (1 lb. a.e.) per acre with labeled rates of Turbo 8EC.

**This Product Plus Poast® as Burndown Prior to Planting Soybeans**

For broad spectrum post-emergence weed control, a tank-mix application of this product with Poast may be made for control of emerged Broadleaf and grass weeds before planting Soybeans. Apply 1 pint of this product (0.5 lb. a.e.) per acre with labeled rates of Poast.

**This Product Plus Scepter® or Squadron® in Pre-plant Applications in No-Till Soybeans**

A tank-mix application of this product with Scepter, Scepter 70 DG or Squadron herbicides may be made to control emerged Broadleaf and grass weeds before planting Soybeans. Apply 1 pint of this product (0.5 lb. a.e.) per acre up to 7 days prior to planting, or 2 pints of this product (1 lb. a.e.) per acre up to 30 days prior to planting, with labeled rates of Scepter, Scepter 70 DG or Squadron herbicides.

**TURF (GROWN FOR SEED OR SOD)**

Weeds	Rate per Acre	Use Instructions
Annual broadleaf weeds	1 to 1.5 pints	Use the lower rate on seedling grasses. Apply to established stands before the seed head comes into the boot stage. Do not spray in boot stage of growth. For seedling grasses, apply in the Spring after grass has tillered or has at least 5 leaves but before boot stage.
Biennial and Perennial weeds	2 to 3 pints	

**USE RESTRICTIONS:**

- Limited to 2 applications per year.
- Maximum of 3 pints (1.42 lbs. a.e.) per acre per application.
- Minimum of 21 days between applications.

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## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**STORAGE:** Protect from freezing. If stored below 32°F and crystals form, warm to 72°F for 24 hours, periodically rolling drum to reconstitute. Do not use, pour, spill or store near heat or open flame.

**PESTICIDE DISPOSAL:** Pesticides are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate, is a violation of Federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

### CONTAINER HANDLING:

#### Nonrefillable Container (rigid material; less than 5 gallons):

Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container one-fourth full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

#### Nonrefillable Container (rigid material; 5 gallons up to < 250 Gals.):

Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container one-fourth full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

#### Refillable Container (≥ 250 Gals. & Bulk):

Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

Dispose of empty container in a sanitary landfill, or by incineration, or by other procedures allowed by State and local authorities.

## WARRANTY—CONDITIONS OF SALE

OUR DIRECTIONS FOR USE of this product are based upon tests believed reliable. Follow directions carefully. Timing and method of application, weather and crop conditions, mixtures with other chemicals not specifically recommended and other influencing factors in the use of this product are beyond the control of the Seller. To the extent consistent with applicable law, Buyer assumes all risks of use, storage and handling of this material not in strict accordance with directions given herewith. To the extent consistent with applicable law, in no case shall the Manufacturer or the Seller be liable for consequential, special or indirect damages resulting from the use or handling of this product when such use and/or handling is not in strict accordance with directions given herewith. To the extent consistent with applicable law, the foregoing is a condition of sale by Manufacturer and is accepted as such by the Buyer.

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